Iowa Manure Matters

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Annual Commercial Manure Applicator Certification Offered on January 7, 2009

by Rachel Klein, Department of Agronomy, Iowa State University

Iowa State University Extension in cooperation with Iowa Department of Natural Resources (IDNR) will be providing the 2009 Commercial Manure Applicators Certification satellite uplink. The satellite uplink will be held on Wednesday, Jan. 7, 2009, at 72 county extension offices. Registration will begin at 8:30 a.m. The program will start at 9:00 a.m. and finish at 12:00 noon. There is no fee to attend the workshop, but commercial applicators must register by Dec. 31, 2008, with the county extension office where they plan to attend.

The program will comply with the three hours of annual training required by IDNR. This year's program will include: rules, record keeping, separation distances, hydrogen sulfide safety issues, road and equipment safety issues, economics of hauling manure, and management practices for winter application of manure. Any commercial manure applicator wishing to recertify or any new applicators wanting to get certified are encouraged to attend the satellite uplink.

As a reminder for those currently certified commercial manure applicators, your license will expire on March 1, 2009. To keep your license current, please send in your forms and fees to the IDNR prior to March 1, 2009, to avoid paying the late charge of $12.50.

Applicators who cannot attend the Jan. 7 satellite downlink, have a choice of scheduling an appointment with a county extension office to watch the video at a later date, or scheduling an appointment with the local IDNR field office to take the test to meet the certification requirements.

Commercial manure applicators must work for only one commercial manure service or business. The commercial manure business license fee is $200; this includes the manager's certification fee. All persons engaged in transporting, handling, storing or applying manure for a business must be certified. Any person working for the business and not the manager, is considered a representative. This certification fee is $75. Both the manager and representatives must pay an additional education fee of $25 for training or to take the exam. All fees go to the IDNR.

There will also be training available in the following locations in Nebraska and Wisconsin:
Boone County, Nebraska (402) 395-2158, in Albion, Nebraska;
Chippewa County, Wisconsin (715) 726-7950, in Chippewa Falls, Wisconsin;
Grant County, Wisconsin (608) 723-2525, in Lancaster, Wisconsin; and
Rock County, Wisconsin (608) 757-5696, in Janesville, Wisconsin.
Please call the extension office you will be attending for additional information.

For those applicators who apply dry manure, there are five workshops offered in February which focus on dry manure issues. Please see Table 2, page 6 for more information.

For more information on the Manure Applicator Certification program, please visit the Iowa Manure Management Action Web site **http://www.agronext.iastate.edu/immag/mac.html** or the Iowa Department of Natural Resources Web site **http://www.iowadnr.gov/afo/appcert.html**.

2009 Confinement Site Manure Applicator Workshops

by Angela Rieck-Hinz, Department of Agronomy, Iowa State University

Confinement site manure applicators are required by law to be certified to handle, transport or apply manure from any confinement facility with more than 500 animal units. Iowa State University Extension will offer workshops in January and February 2009 to help applicators meet certification requirements. The focus of this year's programming will include land application rules, separation distances for land application of manure, valuing and selling manure, road and equipment safety and ISU's new fact sheet on manure management planning.

Confinement site applicators should plan to attend one of the workshops listed in the table to meet their certification requirements or to renew their licenses. In addition to the 82 workshops listed in Table 1, ISU Extension will also offer five dry manure workshops. These dry manure workshops are identified in Table 2.

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IOWA STATE UNIVERSITY
University Extension

(Confinement Site Workshops continued from front page)

Due to the expansion of deep-bedded barns for beef production in Iowa, producers who raise dairy and beef in these types of housing or other types of totally roofed (confinement) housing are also reminded if they have more than 500 animal units (500 beef cows, 357 dairy mature dairy cows 1,250 swine) they also need to be certified to handle, transport or apply manure from these facilities.

To confirm workshop locations and exact times, or to determine meeting options in the event of bad weather, please call the county extension office where you plan to attend the workshop. Registration is not required for these meetings, but you may wish to contact the extension office to ensure there will be adequate space and training materials available.

If you can't attend one of these workshops and you need to attend training, please schedule time at your county extension office to watch the training videotape. Due to scheduling conflicts, many offices will no longer accept walk-in appointments to watch these tapes. If you can't attend the training, please contact your regional Iowa Department of Natural Resources field office to schedule an appointment to take the exam.

Table 1. Confinement Site Manure Applicator Workshops

County	Workshop Location	Telephone	Date	Time	Alternate Meeting Location
Adair	City Hall in Adair	641-743-8412	January 23, 2009	1:30 p.m.	See Adams or Dallas or Pottawattamie (East)
Adams	Boz's Kitchen in Corning	641-322-3184	January 13, 2009	1:30 p.m.	See Adair or Page
Allamakee	County Extension Office in Waukon	563-568-6345	February 17, 2009	1:30 p.m.	See Clayton or Fayette
Benton	County Extension Office in Vinton	319-472-4739	February 5, 2009	9:30 a.m.	See Buchanan or Tama
Black Hawk	Hudson City Hall	319-234-6811	January 23, 2009	9:30 a.m.	See Benton, Buchanan or Butler
Boone	County Extension Office in Boone	515-432-3882	January 12, 2009	1:30 p.m.	See Greene or Story
Bremer	NE Research and Demonstration Farm at Nashua	319-882-4275	January 22, 2009	9:30 a.m.	See Chickasaw or Fayette or Black Hawk
Buchanan	County Extension Office in Manchester	319-334-7161	January 23, 2009	9:30 a.m.	See Delaware or Fayette
Buena Vista	County Extension Office in Storm Lake AEA Office	712-732-5056	February 27, 2009	9:30 a.m.	See Clay, Cherokee or Sac
Butler	NE Research and Demonstration Farm at Nashua	319-267-2707	January 22, 2009	9:30 a.m.	See Floyd or Grundy
Calhoun	County Extension Office in in Rockwell City	712-297-8611	February 10, 2009	9:30 a.m.	See Pocahontas, Sac or Webster
Carroll	County Extension Office in in Carroll	712-792-2364	February 24, 2009	1:30 p.m. **OR** 7:00 p.m.	See Calhoun, Crawford or Greene
Cedar	County Extension Office in Tipton	563-886-6157	January 21, 2009	9:30 a.m.	See Clinton, Scott or Muscatine

County	Workshop Location	Telephone	Date	Time	Alternate Meeting Location
Cerro Gordo	4-H Learning Center North Iowa Fair Grounds	641-423-0844	February 10, 2009	1:30 p.m.	See Hancock, Floyd or Franklin
Cherokee	County Extension Office in Cherokee	712-225-6196	February 17, 2009	9:30 a.m. **OR** 1:30 p.m.	See Plymouth, O'Brien or Buena Vista
Chickasaw	County Extension Office in New Hampton	641-394-2174	January 21, 2009	9:30 a.m.	See Howard or Floyd
Clay	Dickens Community Center	712-262-2264	February 10, 2009	7:00 p.m.	See Dickinson or O'Brien
Clayton	County Extension Office in Elkader	563-245-1451	January 16, 2009	9:30 a.m.	See Allamakee or Fayette
Clinton	Community Center in DeWitt	563-659-5125	January 13, 2009	1:30 p.m.	See Cedar or Scott
Crawford	Western Iowa Research Farm at Castana	712-263-4697	February 27, 2009	1:30 p.m.	See Ida, Monona, Carroll or Shelby
Dallas	County Extension Office in Adel	515-993-4281	January 14, 2009	1:30 p.m.	See Greene or Boone
Davis	County Extension Office in Bloomfield	641-664-2730	January 27, 2009	1:30 p.m.	See Wapello or Jefferson
Delaware	County Extension Office in Manchester	563-927-4201	January 23, 2009	9:30 a.m.	See Buchanan, Clayton or Dubuque
Des Moines	County Extension Office in Burlington	319-754-7556	January 15, 2009	9:30 a.m.	See Henry or Lee
Dickinson	Estherville Library	712-336-3488	February 10, 2009	1:30 p.m.	See Osceola or Emmet
Dubuque	County Extension Office in Dubuque	563-583-6496	January 15, 2009	1:30 p.m.	See Clayton, Delaware or Jones
Emmet	Estherville Library	712-362-3434	February 10, 2009	1:30 p.m.	See Dickinson or Kossuth
Fayette	County Extension Office in Fayette	563-425-3331	February 4, 2009	1:30 p.m.	See Clayton or Chickasaw
Floyd	Northeast Research and Demonstration Farm at Nashua	641-228-1453	January 22, 2009	9:30 a.m.	See Mitchell or Chickasaw
Franklin	County Extension Office in Hampton	641-456-4811	February 19, 2009	9:30 a.m.	See Hardin or Wright
Greene	County Extension Office in Jefferson	515-386-2138	January 15, 2009	1:30 p.m.	See Carroll or Boone

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County	Workshop Location	Telephone	Date	Time	Alternate Meeting Location
Grundy	Hudson City Hall	319-824-6979	January 23, 2009	9:30 a.m.	See Hardin or Marshall
Hamilton	County Extension Office in Webster City	515-832-9597	February 10, 2009	9:30 a.m. **OR** 1:30 p.m.	See Webster or Wright
Hancock	County Extension Office in Garner	641-923-2856	February 18, 2009	1:30 p.m.	See Kossuth or Wright
Hardin	County Extension Office in Iowa Falls	641-648-4850	January 21, 2009	1:30 p.m. **OR** 7:00 p.m.	See Hamilton or Franklin
Henry	County Extension Office in Mount Pleasant	319-385-8126	January 15, 2009	1:30 p.m.	See Des Moines, Jefferson or Lee
Howard	County Extension Office in Cresco	563-547-3001	February 9, 2009	9:30 a.m.	See Mitchell or Chickasaw
Humboldt	County Extension Office in Humboldt	515-332-2201	February 16, 2009	1:30 p.m.	See Pocahontas or Wright
Ida	Correctionville Community Center	712-364-3003	January 16, 2009	9:30 a.m.	See Sac or Cherokee
Jasper	County Extension Office in Newton	641-792-6433	January 26, 2009	1:30 p.m.	See Marshall or Mahaska
Jefferson	County Extension office in Fairfield	641-472-4166	February 3, 2009	9:30 a.m.	See Keokuk, Wapello or Washington
Johnson	Gringer Ag	319-337-2145	January 20, 2009	9:30 a.m.	See Cedar or Washington
Jones	County Extension Office in Anamosa	319-462-2791	February 5, 2009	1:30 p.m.	See Cedar or Dubuque
Keokuk	Expo building, Keokuk County Fairgrounds	641-622-2680	February 10, 2009	9:30 a.m.	See Mahaska, Washington or Wapello
Kossuth	Community Center in Burt	515-295-2469	February 11, 2009	1:30 p.m.	See Hancock or Humboldt
Lee	Pilot Grove Savings Bank in Donnellson	319-835-5116	February 3, 2009	1:30 p.m.	See Henry or Des Moines
Louisa	SE Research Farm at Crawfordsville	319-523-2371	January 20, 2009	1:30 p.m.	See Washington, Muscatine or Des Moines
Lyon	Forster Community Bldg. in Rock Rapids	712-472-2576	February 5, 2009	1:30 p.m.	See Osceola, Sioux or O'Brien
Mahaska	County Extension Office in Oskaloosa	641-673-5841	February 10, 2009	1:30 p.m.	See Keokuk or Jasper

County	Workshop Location	Telephone	Date	Time	Alternate Meeting Location
Marshall	County Extension Office in Marshalltown	641-752-1551	February 12, 2009	1:30 p.m.	See Jasper, Story or Tama
Mitchell	County Extension Office in Osage	641-732-5574	February 9, 2009	1:30 p.m.	See Howard or Floyd
Monona	Western Iowa Research Farm at Castana	712-423-2175	February 27, 2009	1:30 p.m.	See Woodbury
Muscatine	County Extension Office in Muscatine	563-263-5701	January 21, 2009	1:30 p.m.	See Cedar, Johnson or Scott
O'Brien	Northwest Iowa Community College Bldg C in Sheldon	712-957-5045	February 2, 2009	7:00 p.m.	See Osceola, Sioux, Clay or Cherokee
Osceola	Senior Center in Sibley **NOTE:** location change	712-754-3648	February 25, 2009	9:30 a.m. **OR** 1:30 p.m.	See Lyon, Dickinson or O'Brien
Page	County Extension Office in Clarinda	712-542-5171	February 3, 2009	1:30 p.m.	See Adams or Pottawattamie (East)
Palo Alto	Dickens Community Center	712-852-2865	February 10, 2009	7:00 p.m.	See Clay or Kossuth
Plymouth	Prime Bank in LeMars	712-546-7835	February 9, 2009	1:30 p.m. **OR** 7:00 p.m.	See Sioux, Cherokee or Woodbury
Pocahontas	Community Center in Rolfe	712-335-3103	January 27, 2009	1:30 p.m.	See Buena Vista or Humboldt
Pottawattamie (East)	Fire Station Meeting Room in Hancock	712-482-6449	January 8, 2009	7:00 p.m.	See Shelby
Sac	County Extension Office in Sac City	712-662-7131	February 26, 2009	9:30 a.m.	See Ida, Carroll or Buena Vista
Scott	County Extension Office in Bettendorf	563-359-7577	January 13, 2009	7:00 p.m.	See Clinton, Cedar or Muscatine
Shelby	County Extension Office in Harlan	712-755-3104	January 27, 2009	1:30 p.m.	See Crawford or Pottawattamie (East)
Sioux	County Extension Office in Orange City	712-737-4230	January 15, 2009	9:30 a.m. **OR** 1:30 p.m.	See Lyon or Plymouth
Story	County Extension Office in Nevada	515-382-6551	February 23, 2009	1:30 p.m.	See Boone or Marshall
Tama	County Extension Office in Toledo	641-484-2703	February 26, 2009	7:00 p.m.	See Marshall or Benton
Wapello	County Extension Office in Ottumwa	641-682-5491	January 27, 2009	7:00 p.m.	See Keokuk, Jefferson or Davis
Washington	County Extension Office in Washington	319-653-4811	February 12, 2009	7:00 p.m.	See Johnson, Keokuk or Louisa

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County	Workshop Location	Telephone	Date	Time	Alternate Meeting Location
Wayne	Courthouse in Corydon	641-872-1755	January 14, 2009	1:30 p.m.	See Davis
Webster	County Extension Office in Fort Dodge	515-576-2119	February 2, 2009	1:30 p.m.	See Calhoun, Humboldt or Hamilton
Winnebago	County Extension Office in Garner	641-584-2261	February 18, 2009	1:30 p.m.	See Kossuth or Hancock
Winneshiek	County Extension Office in Waukon	563-382-2949	February 17, 2009	1:30 p.m.	See Howard, Fayette or Allamakee
Woodbury	Correctionville Community Center	712-276-2157	January 16, 2009	9:30 a.m.	See Plymouth or Monona
Worth	4-H Learning Center North Iowa Fair Grounds	641-324-1531	February 10, 2009	1:30 p.m.	See Mitchell or Winnebago
Wright	County Extension Office in Clarion	515-532-3453	February 4, 2009	1:30 p.m.	See Franklin, Hamilton or Humboldt

Table 2. Dry Manure Applicator Certification Workshops

These workshops will focus on dry manure issues and will meet certification requirements for both commercial and confinement site manure applicators. The workshops are 3 hours in length. Please register for one of these workshops by calling the appropriate site.

February 4, 2009	1:00 p.m.	County Extension Office, Storm Lake, IA 712-732-5056
February 11, 2009	1:00 p.m.	Branding Iron Restaurant, Thompson, IA 641-584-2261
February 18, 2009	1:00 p.m.	Trinity Lutheran Church, Ellsworth, IA 515-832-9597
February 20, 2009	1:00 p.m.	Heartland Museum, Clarion, IA 515-532-3453
February 24, 2009	9:00 a.m.	Greenfield Chamber of Commerce Meeting Room, Greenfield, IA 641-743-8412

Please register for one of these meetings by calling the appropriate site.

Resources:

Iowa Department of Natural Resources Animal Feeding Operations
http://www.iowadnr.com/afo/index.html

Iowa Department of Natural Resources- Applicator Certification
http://www.iowadnr.com/afo/appcert.html

Iowa Department of Natural Resources Field Offices
http://www.iowadnr.com/fo/index.html

24-Hour Emergency Spill Response
515/281-8694

Iowa Manure Matters Action Group (IMMAG)
http://www.agronext.iastate.edu/immag/

ISU's Manure Applicator Certification Web Page
http://www.agronext.iastate.edu/immag/mac.html

Dec. 31 Deadline for Combined Indoor/Outdoor Livestock Operations

by Karen Grimes and Randy Clark, Iowa Department of Natural Resources

As many producers with combined open feedlot/confinement operations already know, they may be required to apply for a National Pollutant Discharge Elimination System (NPDES) permit by Dec. 31, 2008.

Those who must apply include producers who meet both of the following conditions:

- House a large number of animals of the same type in both indoor (totally roofed) and outdoor facilities. The key words here are "animals of the same type" as provided in federal regulations
- Have manure, manure-laden runoff or process wastewater (such as bedding or feedstuffs) run off to reach Iowa waters.

Dairy and cattle producers are the most likely to be affected by this requirement. It's important to understand that mature dairy cows are one distinct type of animal. It takes 700 or more milked or dry mature dairy cows housed both indoors and out to need an NPDES permit. Another separate type of animal is veal calves, with 1,000 or more in combined housing requiring a permit. Then, all other cattle (1,000 or more) would be a third and different type of animal. This category could include heifers or steers; dairy or beef. See Table 1 for a list of animal types and the number of animals needed to determine permit status.

Swine producers with 2,500 finishers who have combined confinement and partially roofed open lots could also need a permit.

More information and the animal numbers for each type can be found in a fact sheet on the DNR web site at **http://www.iowadnr.com/afo/permits.html**

Producers who think their operation may need a permit should act quickly to apply for the NPDES permit before Dec. 31. Please note that this change is in addition to requirements concerning when an open feedlot, not combined, must obtain an NPDES permit; those requirements have not changed.

Act Now! — What to Do If You Need a Permit

Producers who need an NPDES permit must apply by Dec. 31, 2008.

Producers who are affected must:

- submit a complete NPDES permit application,
- develop a nutrient management plan that involves soil sampling and public notice,
- decide on any needed construction and find an engineer

— all before the end of 2008

Table 1. Type of Animals and Minimum Number of Animals to Require a Permit[1]

Type of Animal	Number of Head
Mature Dairy Cows, milked or dry	700
Veal Calves	1,000
All Other Cattle (beef or dairy steers, heifers or bulls; cow/calf pairs)	1,000
Swine (55 lbs. or more)	2,500
Swine (less than 55 lbs.)	10,000
Horses	500
Sheep or Lambs	10,000
Turkeys	55,000
Laying hens or broilers (liquid manure handling system)	30,000
Laying hens (other manure handling system)	82,000
Chickens (other than laying hens, other manure handling system)	125,000

[1] This table has been adapted from the DNR fact sheet "NPDES Permits: Determining if a Combination Open Feedlot and Animal Confinement Must Apply for a NPDES Permit in 2008."

Planning Considerations for Livestock and Poultry Mortality Disposal: Part 3 – Composting

by Tom Glanville, Department of Agricultural & Biosystems Engineering, Iowa State University

In the summer and fall issues of the *Odor and Nutrient Management Newsletter*, the pros and cons of rendering, incineration, and on-farm burial of poultry and livestock were discussed. In this issue, I'll review key aspects of the relatively new on-farm disposal option of composting.

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(Mortality Disposal continued from page 7)

Spurred by declining availability of rendering service, and growing public concern over groundwater pollution potential of on-farm burial, use of composting for management of mortalities was pioneered in the large-scale broiler and turkey production operations in Maryland and Delaware during the late 1980s. Composting turned out to be particularly well suited for poultry operations since the sawdust and wood shavings typically used as floor bedding in poultry barns proved to be an excellent cover material for carcass composting.

As word of the success of composting spread, it was applied to larger species, often in response to reduced access to timely rendering service. Swine mortality composting was pioneered by Charles Fulhage at the University of Missouri in the early to mid 1990s, and today is used by a significant and growing proportion of swine producers throughout the Midwest. In the late 1990s composting was adapted for disposal of routine cattle mortalities in Colorado, Texas, Oklahoma and Kansas.

The composting methods used in poultry and livestock production are relatively simple. The process is started by laying down a thick base layer of absorptive crop residue such as ground cornstalks, ground straw or—in the arid regions of Texas and western Kansas—dry scraped feedlot manure. A layer of carcasses is placed on top of the absorptive base, and then covered with 6 to 24 inches of the same material used in the base. The larger the species, the thicker the layer of cover material necessary to absorb liquids, retain heat, and discourage insects and rodents. If carcasses are large (greater than 500 pounds), the compost pile is usually limited to a single layer of carcasses. For smaller species, it is common to stack several layers of carcasses, separated by a suitable thickness of cover material, until pile height reaches roughly 5 feet.

The composting process is sensitive to moisture levels that are too high or too low. In Iowa's humid climate, excessive wetness is the most common problem. Since carcasses themselves are 65 percent water, it doesn't take a great deal of precipitation to cause excessive pile wetness, a condition that can slow decay and cause odor problems. For this reason, it is recommended that composting in Iowa be done in roofed bins that protect the pile from precipitation during wet seasons. If composting will not be done on a permanent basis, then covering piles with a tarp can provide temporary protection against excessive precipitation.

In cases of catastrophic loss caused by fire, flood, or disease, unsheltered windrows are often the most practical emergency composting option. Piles are formed into long narrow "windrows" that increase the potential for natural ventilation and drying of the piles. Since construction of a roof, or even use of tarps, may not be a practical option during emergencies, extra thick base and cover layers are used to temporarily absorb precipitation until it can evaporate from the pile.

In field research conducted for the Iowa DNR and USDA by Iowa State University, emergency composting in unsheltered windrows proved effective in heat treating and decomposing 1,000 pound cattle carcasses during all seasons of the year. With cover and base layers of sufficient thickness, odor emissions were negligible and inoffensive (usually characterized as smelling like straw or cornstalks), and the total amount of N added to the soil beneath the windrows was only 10 to 25 percent of the total amount of N in the carcasses and which would have been added to the soil by burial. Furthermore, the highest N concentrations were in the top two feet of soil where crop uptake is possible, rather than 5 to 6 feet below ground as is typical for burial.

Producers who use composting say the things they like about it include the flexibility to handle carcasses of all sizes. Producers also say that it puts them in control of timely disposal during hot weather, and can be done with typical farm equipment such as a skid loader, tractor loader and solid manure spreader.

Negative aspects of composting include the need for relatively large quantities of cover material (7 to 8 cubic yards of ground straw or cornstalks per 1,000 pounds of carcasses in bin composting, and as much as 12 cubic yards per 1,000 pounds for emergency windrow composting of large species). Use of finished compost as a cover material can help reduce cover material quantities somewhat.

Another important consideration for composting is that the process takes longer than other disposal options. Decomposition time depends on both carcass size and seasonal temperatures. During warm weather, birds and small stock weighing 20 pounds or less can usually be decomposed in 2 to 4 weeks. Larger sheep and swine weighing up to 200 pounds can take 2 to 3 months during warm weather, and 1,000 pound cattle can take 4 to 5 months. If composting is begun during cold weather, decompositions times can be 2 to 3 times those for warm weather. The finished compost usually contains bones (particularly for large species), and

the end product must be disposed of, usually by applying it to cropland much like solid manure. Unlike manure, however, the N and P content of mortality compost is usually quite low unless dry manure is used in the composting process.

As for all mortality disposal options, cost is a key consideration. Composting costs vary widely depending on whether special structures are erected, if cover material is available on the farm or must be purchased, and also on the size of the operation. In a comprehensive 2001 survey of 300 Iowa swine producers using the four major disposal options (rendering, incineration, burial, and composting) the average reported total cost (sum of all capital and operating costs) for composting was less than for incineration and burial, but greater than for rendering.

For more detailed information on routine and emergency composting procedures, check out the following websites maintained by the Agricultural & Biosystems Engineering Department at Iowa State University.

www.abe.iastate.edu/pigsgone/

www.abe.iastate.edu/cattlecomposting

USEPA Final Concentrated Animal Feeding Operation Rule Published

by Joe Lally, Department of Economics, Iowa State University

The USEPA filed the final Concentrated Animal Feeding Operation (CAFO) Rule in the Federal Register on Nov. 20, 2008. The anticipated effective date of the rule will be Dec. 20, 2008.

The Heartland Regional Water Quality Project has consistently worked to provide educational materials, workshop events, conference calls, and newsletters highlighting the CAFO Rule as it was published in 2003. This coordinated effort involves the regulatory agencies, land grant universities, and NRCS in the states of Iowa, Nebraska, Kansas, and Missouri, which are the four states in EPA's Region 7. The Heartland Regional Water Quality Project working group followed the public hearings and litigation, and responded to the 2006 request for comments. The livestock industry in EPA Region 7 has experienced state regulations that, for the most part, have been in place for several years and this final CAFO Rule does not demand any major changes in management.

Over the course of the last two weeks, we have participated in several outreach activities provided by EPA, including a review of the CAFO Rule as published in the Federal Register. Keep in mind that the final CAFO Rule is a revision to the 2003 Rule that was mandated by the Waterkeepers Decision of the second circuit court. The key highlights of the final CAFO Rule are discussed below.

Revised the 'Duty to Apply"

The 2003 CAFO Rule indicated that all CAFOs had a "Duty to Apply" for an National Pollutant Discharge Elimination System (NPDES) Permit. That feature was revised in the latest CAFO Rule to now read "a CAFO that does or will discharge" on a site specific, case by case basis will need to apply for an NPDES Permit. Each CAFO will be responsible for determining its discharge risk by completing an objective site assessment of the CAFO's facility design, operation, and maintenance. In the event that a CAFO has had a previous discharge (without a NPDES Permit), and permanently fixed the cause of the discharge, the CAFO is not required to file for an NPDES Permit if the current design achieves the "no discharge" status.

Introduces a new 'Certification" option

The final CAFO Rule provides for a new category of regulatory control referred to as "Certification". This is a voluntary certification on the part of the CAFO to self certify that no discharge will occur. Confinement farms are the most likely CAFOs to pursue this option. Additional certification details will be available by spring, and it will be up to the individual states to initiate this option under a timeline of their choosing.

Additional Nutrient Management Plan (NMP) requirements

Additional NMP requirements further detail the framework of an acceptable NMP. Two options were identified, the ***"linear"*** approach, and the ***"narrative"*** approach. The narrative model was promoted by the Heartland NMP Working Group. The terms of the NMP will be required to become part of the NPDES Permit (if they're not already required), and will be defined by the states. The key here is to identify the methods and protocols used to determine the manure application rates. This concept follows the strategic and annual plan concepts already in place in some Region 7 states.

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(Feeding Operation Rule continued from page 9)

Some additional details that may impact livestock farms on a case by case basis involve setbacks, land application rates that are determined by landform features, and the use,or lack of use of conservation practices, tillage practices, rotation, etc.

Alternative New Source Performance Standards (NSPS) provisions for swine, poultry, and veal facilities

There were no changes in the NSPS provisions laid out in the 2003 CAFO Rule. This section of the CAFO Rule details the inclusion of certain swine, poultry, and veal calf facilities not previously included in CAFO Permit requirements. It outlines the fact that "no discharge" is allowed from the production area, and that precipitation-based overflows are not exempt.

Best Conventional Technologies (BCT)

The final Rule reaffirmed no changes in previously published rules regarding production area discharges, precipitation-based overflows, land application rates to minimize nutrient losses from manure application fields, and required setbacks, along with vegetated buffers.

This final Rule from EPA will require additional rulemaking and legislative code adjustments in part, for the states in Region 7. Each of the Region 7 states will look to the state regulatory agency as the permitting authority to write the details to this final CAFO Rule. Most of the farms with livestock that will be impacted by this rule are already doing what will likely be required. All existing NPDES permitted farms already were required to have filed an NMP by Dec.31, 2006. "Newly defined" farms now coming under CAFO regulations, have until Feb.27, 2009 to apply for NPDES Permits. A NMP will need to be filed with the NPDES Permit application. For all new facilities falling under the NPDES Permit rules, applications and NMP's will be filed and public noticed at the same time as the construction application itself. Please note: the deadline for CAFOs in Iowa that meet NPDES requirements for combined operations (confined and open lot) have until Dec. 31, 2008 to apply for their NPDES Permit. See article "Dec. 31 Deadline for Large Combined Indoor/Outdoor Livestock Operations" on page 7 for more details.

Additional information regarding the CAFO Rule can be found at:
http://www.epa.gov/npdes/regulations/cafo_final_rule_preamble2008.pdf

http://cfpub.epa.gov/npdes/afo/aforule.cfm

For an example "narrative model NMP" please see:
http://www.heartlandwq.iastate.edu/ManureManagement

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